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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/905,486	07/16/2001	Anthonyus Martinus Lambertus Habraken	BO 43780	3688

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EXAMINER

HARAN, JOHN T

ART UNIT	PAPER NUMBER
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1733

DATE MAILED: 06/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/905,486

Applicant(s)

HABRAKEN ET AL.

Examiner

John T. Haran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2004.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 8-14 is/are pending in the application.
- 4a) Of the above claim(s) 6 and 8-13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This office action is in response to the amendment filed on 2/17/04.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-5 and 14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 1 and 14 both now have the limitation that the light source is displaced in a radial direction following the progression of the glue front. On page 2 the specification states, "this device has a radiation source which emits a light beam which can be displaced in the radial direction with respect to the mandrel". This provides support for the light beam to be displaced in the radial direction but not for the light source. Similarly, original claim 7 stated, "the light beam can be displaced in the radial direction with respect to the mandrel". There is no indication in the figures or disclosure that the displacing the light beam requires displacing the light source. Furthermore it is well known and conventional in the art that a light beam can be displaced radially without moving the light source, as shown for example in Figure 1 of Ohno et al (U.S. Patent 6,613,170) or Figure 5 of Maenza (U.S. Patent 5,968,305). One skilled in the art

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reading the application as a whole, at the time the application was filed, would not have understood the applicant to have had possession of displacing the light source with respect to the mandrel and that such is new matter.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 2, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ewerlof et al (U.S. Patent 6,402,880) in view of Ohno et al (U.S. Patent 6,613,170) or Maenza (U.S. Patent 5,968,305).

Ewerlof et al discloses a method for gluing together first and second disc elements to manufacture a DVD wherein a flexible center peg is placed in the center hole of a rotating table, a bottom substrate is pressed down on the center peg into abutment with the rotating table wherein the peg seals against the edge of the substrate's center hole; a glue ring is applied to the bottom substrate so that it contacts the peg; the top substrate is pressed down against the first substrate to enclose the glue; the assembly is rotated to spread the glue along an expanding front between the two substrates; the glue around the peg (immediately behind the glue front) is cured (stabilized) with UV light radiation; the entire disc is subsequently irradiated with UV light after spreading of the glue to cure all the glue while rotating; and the glued together

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disc is removed from the rotating table (Column 3, line 61 to Column 5, line 46). It appears that Ewerlof uses a UV lamp to do the initial curing and then uses a separate UV drier to perform the full cure and is silent towards using a single UV light source that is displaced in a radial direction following the progression of the glue front.

It is well known and conventional to have a UV light source that moves radially from an inner circumference of a disc assembly to the outer circumference of a disc assembly while it is rotating to spread adhesive from the center of the disc to the outer edges of the disc in order to initial cure the adhesive in the central region and to then cure the remainder of the adhesive as it spreads to the outer circumference of the disc assembly as shown for example in Maenza (Figure 3; Column 3, lines 44-62) or Ohno et al (Figures 16-17; Column 19, lines 53-57). One skilled in the art would have readily appreciated that the approach of Maenza and Ohno achieve the same result as Ewerlof but does so in a more efficient manner by using a single light source. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have a single UV light source that is displaced radially from the inner circumference to the outer circumference following the progression of the spreading glue front in order to initially cure the adhesive in the central region and to then cure the remainder of the adhesive as it spreads to the outer circumference of the disc assembly in the method of Ewerlof, as suggested in Maenza and Ohno.

Regarding claim 14, the method of Ewerlof, as modified above would include the claimed sequential steps. It is noted that claim 14 does not claim the rotary member comprises a peg.

Regarding claim 2, Ewerlof teaches using UV light radiation.

6. Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ewerlof et al (U.S. Patent 6,402,880) in view of Ohno et al (U.S. Patent 6,613,170) or Maenza (U.S. Patent 5,968,305) as applied to claims 1, 2, and 14 above, and further in view of Kazumi (JP 62124629).

Ewerlof et al teaches providing the rotary member with a peg (mandrel) that comprises a stable core with a flexible, elastomeric outer layer or covering and that the peg acts as a seal against the edges (walls) of the central holes of the disc elements (Column 5, lines 38-45), but is silent towards expanding the peg (mandrel) to bear flush against the edges of the central holes of the disc elements.

Kazumi teaches a method for bonding discs together wherein the discs are placed on a table with a center boss (mandrel) wherein the boss has an elastic sleeve around it which is expanded by pressurized air to press against the edges of the center holes of the discs in order to form a seal and prevent adhesive from flowing into the holes (See English abstract).

One skilled in the art would have readily appreciated that the mandrels of Ewerlof and Kazumi accomplish the same goal of sealing by having the mandrel bear flush against the walls of the central holes of the discs and are functional equivalents and alternate expedients. One skilled in the art would readily appreciated using a known alternate expedient in the method of Ewerlof. Additionally one skilled in the art would have recognized that the expanding mandrel of Kazumi allows for bonding discs with

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different sized holes without having to have a separate mandrel for each size hole as would be necessary in the method of Ewerlof. It would have been obvious to one of ordinary skill in the art at the time the invention was made to alternatively use an expanding boss (mandrel) and expanding the boss with pressurized air to bear flush against the wall of the central hole of the disc in the method of Ewerlof et al as suggested in Kazumi.

Regarding claim 4, the boss (mandrel) of Kazumi has a relatively hard core and a flexible sleeve that surrounds the core and expands by means of pressurized air (See English abstract and Figures).

Regarding claim 5, one skilled in the art would have readily appreciated that the second disc half would press against the expanded boss as it is brought into contact with the first disc half and in the process would scrape down any adhesive on the boss (mandrel) along the way. It would have been obvious that such would occur in the method of Ewerlof et al, as modified above.

Response to Arguments

7. Applicant's arguments with respect to claims 1-5 and 14 have been considered but are moot in view of the new ground(s) of rejection.

As noted above it appears that requiring the light source to move is new matter.

Also as noted above it is well known and conventional to have a UV light source that moves radially from an inner circumference of a disc assembly to the outer circumference of a disc assembly while it is rotating to spread adhesive from the center

of the disc to the outer edges of the disc in order to initial cure the adhesive in the central region and to then cure the remainder of the adhesive as it spreads to the outer circumference of the disc assembly as shown for example in Maenza (Figure 3; Column 3, lines 44-62) or Ohno et al (Figures 16-17; Column 19, lines 53-57).

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **John T. Haran** whose telephone number is **(571) 272-1217**. The examiner can normally be reached on M-Th (8 - 5) and alternate Fridays.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John T. Haran



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